

CONTACT PROCESS AND STRUCTURE FOR A SEMICONDUCTOR DEVICE

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ABSTRACT OF THE DISCLOSURE

A contact process for a semiconductor device containing
a base region of a first conductivity type formed on a
semiconductor substrate comprises formation of a first shallow
10 layer of the first conductivity type on the base region, deposition of
an insulator on the first shallow layer, etching the insulator and
first shallow layer to form a contact hole, thermally driving the first
shallow layer more deeply into said base region, formation of a
15 second shallow layer of a second conductivity type on the base
region at the bottom of the contact hole, filling a metal in the
contact hole to contact the sidewall of the first shallow layer and
the second shallow layer.